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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,111	01/04/2002	Venkatesh R. Iyer	24523-09627	8633

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EXAMINER
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SWEARINGEN, JEFFREY R

ART UNIT	PAPER NUMBER
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2145

MAIL DATE	DELIVERY MODE
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01/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/039,111	<b>Applicant(s)</b> IYER ET AL.	
	<b>Examiner</b> Jeffrey R. Swearingen	<b>Art Unit</b> 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 31-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/20/07 has been entered.

### ***Response to Arguments***

2. Applicant cancelled claims 1-30 to overcome the outstanding rejections over Dietz and 112. Applicant stated that an application verb was limited to "a specific application-layer transaction within the application". One of ordinary skill in the art remains unaware of Applicant's intended claim scope based on Applicant's prior statement within the specification that an application verb is "any specific application transaction or transaction type." Original Specification, page 4, lines 10-11. The only exemplary instruction given by Applicant in both the newly filed remarks and the original specification (page 17, lines 2-3) is "GET is an application verb (within the HTTP application)" as restated in remarks of 9/20/2007, page 8.

3. One of ordinary skill in the art is unaware what constitutes an "application verb". One of ordinary skill in the art is unaware what constitutes a "network application" related to the application verbs claimed by Applicant. Based on this limited instruction provided by Applicant, one of ordinary skill in the art is unable to determine the scope or enablement of the "application verb being a specific application-layer transaction within the application."

4. New rejections under 35 U.S.C. 112 have been appropriately made against the newly filed claims.

5. Applicant argued Dietz failed to disclose *responsive to determining that the portion of the application verb represents a completed response of the application verb, calculating a response time associated with the application verb between a request of the application verb and the completed response of the application verb*. See column 7, lines 53-65.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 31-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

8. The test of enablement is given in MPEP 2164.01. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) gave a series of factors for consideration to determine whether sufficient information existed regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention and whether any necessary experimentation is "undue". These factors include, but are not limited to:

- (a) The breadth of the claims;
- (b) The nature of the invention;
- (c) The state of the prior art;
- (d) The level of one of ordinary skill;
- (e) The level of predictability in the art;
- (f) The amount of direction provided by the inventor;
- (g) The existence of working examples; and
- (h) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

*In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988)

The *Wands* factors are applied below.

- (a) The breadth of the claims;

Applicant claimed identifying portions of application verbs in a data packet, where the application verb is a specific application-layer transaction within a network application.

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Applicant's specification defines an application verb as "any specific application transaction or transaction type". Specification, page 4. Applicant provides a single reference as exemplary of an application verb for a network application: the GET command for HTTP. Specification, page 17.

Applicant has claimed "any specific application transaction" for any network application. It is impossible to determine Applicant's invention given the scope of Applicant's claims. It is impossible to implement Applicant's invention given the scope of Applicant's claims and the lack of support in the specification for the amount of claim breadth and scope.

(b) The nature of the invention;

Applicant's invention is for dealing with application verbs from network applications. Applicant failed to give any reasonable definition of either an application verb or a network application which would contain an application verb. One of ordinary skill in the art is therefore unable to reasonably determine the nature of Applicant's invention, much less how to make, enable, use, or implement Applicant's invention.

(c) The state of the prior art;

Applicant has cited three pieces of art to assist in the examination of Applicant's invention. None of these pieces of prior art shed light on the enablement or scope of Applicant's invention. A search of the prior art is unable to reveal what Applicant intends by the term "application verb."

(d) The level of one of ordinary skill;

One of ordinary skill in the art is presumed to have a Bachelor's degree in electrical or computer engineering, and 3-5 years of industry experience. Alternately, one of ordinary skill is presumed to be the inventor. The specification and claims do not enable one of ordinary skill to understand or implement the invention based on the knowledge of one of ordinary skill would possess at the time of the invention.

(e) The level of predictability in the art;

Not applicable to this situation

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- (f) The amount of direction provided by the inventor;

Applicant failed to provide adequate direction in what an application verb is, or how application verbs are contained in network applications. As the claimed invention is based around these two seminal terms, and the specification fails to provide reasonable guidance on these terms to assist one of ordinary skill, it is determined that one of ordinary skill would suffer the burden of undue experimentation in implementing the invention.

- (g) The existence of working examples;

No working examples have been provided to the Office.

and

- (h) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

One of ordinary skill faces multiple deficiencies with Applicant's disclosure. Applicant failed to give a reasonable definition and/or scope of the term "application verb" to allow one of ordinary skill to determine what an application verb is or how to track said application verb. Applicant gave a single example of an "application verb" – the GET command of HTTP. This single example was provided for one of ordinary skill to ascertain what an application verb was, and what an appropriate network application would be to apply the application verb.

Faced with the lack of knowledge of what could constitute an application verb, what could constitute an application protocol, and what could constitute an application level transaction, one of ordinary skill could not enable the invention as claimed without suffering the burden of undue experimentation.

9. Claims 32 and 39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The information provided in claims 32 and 39 – dealing with checking for retransmissions, out-of-sequence packets, errors, and complications – was not present in the specification as originally filed.

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10. Claim 45 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the single means of a workstation (specification, page 9, lines 19-21), does not reasonably provide enablement for all means claimed in claim 45. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to enable the invention commensurate in scope with these claims. Claim 45 is a single means claim. The specification enable the single means of the workstation in page 9, lines 19-21. The specification failed to enable any other means within the specification.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 31-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). Applicant's claims freely use the term "application verb". A verb is known as something describing an action. Applicant's specification indicates that GET may be considered valid, which conversely indicates it may also be not considered valid. Specification, page 15, lines 13-17. Applicant's specification indicates that ACK – which does not perform a function but is a status update – likewise may or may not be considered a valid verb. Specification, page 15, lines 13-17. The term "application verb" is indefinite because the specification does not clearly redefine the term. Applicant's apparent definition in the specification, read in its broadest interpretation, allows both non-action and action commands to be associated with the term "application verb", which is well beyond what one of ordinary skill could reasonably interpret a "verb" as. One of ordinary skill in the art cannot reasonably ascertain what Applicant intends by an "application verb" from the specification and claims as they currently stand.

**Claim Rejections - 35 USC § 102**

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 31-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Dietz et al. (US 6,839,751 B1).

16. In regard to claims 31, 38, 45, Dietz disclosed:

*receiving a data packet containing application-layer data related to a network application;*

column 7, lines 53-65

*identifying a portion of an application verb in the data packet, the application verb being a specific application-layer transaction within the application;* column 7, lines 53-65

*updating a state machine based on the portion of the application verb, the state machine comprising a current state of the application;* column 7, lines 53-65

*determining whether the portion of the application verb represents a completed response of the application verb based on the updated state machine, a completed response being a response of the application verb with no further response of the application verb being expected; and* column 7, lines 53-65

*responsive to determining that the portion of the application verb represents a completed response of the application verb, calculating a response time associated with the application verb between a request of the application verb and the completed response of the application verb.*

column 7, lines 53-65

17. In regard to claims 32, 39, Dietz disclosed:

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*determining whether the portion of the application verb represents a completed response of the application verb based on the updated state machine further comprises checking for retransmissions, out-of-sequence packets, errors, and complications.* Column 4, lines 26-30

18. In regard to claims 33, 40, Dietz disclosed:

*identifying a protocol identifier associated with the application and determining a number of known application verbs associated with the protocol identifier.* Column 6, lines 20-35; column 7, lines 53-65

19. In regard to claims 34, 41, Dietz disclosed:

*allocating memory for a data structure based on the number of known application verbs associated with the protocol identifier.* Column 11, lines 30-36

20. In regard to claims 35, 42, Dietz disclosed:

*a current node of the state machine and a last seen application verb are stored as a bit vector.* Column 9, lines 40-58

21. In regard to claims 36, 43, Dietz disclosed:

*the calculated response time associated with the application verb is mapped to a RMON tree.* Column 27, line 41 – column 28, line 55

22. In regard to claims 37, 44, Dietz disclosed:

*calculating a response time associated with the application verb is performed in real-time.*  
Column 32, lines 1-51

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571)272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571-272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey R. Swearingen  
Examiner  
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JRS

/Jason D Cardone/  
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